

1-52. (CANCELED)

053. (NEW) A photovoltaic device, including a photovoltaic element including a plurality of layers, and an envelope, at least a portion of the envelope having a curved profile.

054. (NEW) A photovoltaic device in accordance with claim 53, wherein the plurality of layers of the photovoltaic element are of differing chemical composition.

055. (NEW) A photovoltaic device in accordance with claim 53, wherein one or more of the plurality of layers of the photovoltaic element are foamed within the envelope.

056. (NEW) A photovoltaic device in accordance with claim 53, wherein one or more of the plurality of layers of the photovoltaic element are formed on the envelope.

057. (NEW) A photovoltaic device in accordance with claim 53, wherein the envelope forms a dome containing the device.

058. (NEW) A photovoltaic device in accordance with claim 57, wherein the dome is substantially a hemisphere.

059. (NEW) A photovoltaic device in accordance with claim 57, wherein the dome is mounted on a substrate forming a base of the dome.

060. (NEW) A photovoltaic device in accordance with claim 53, wherein the envelope substantially encapsulates the device.

061. (NEW) A photovoltaic device in accordance with claim 60, wherein the envelope is in a form of a sphere.

062. (NEW) A photovoltaic device in accordance with claim 60, wherein the envelope is in a form of a polyhedron.

063. (NEW) A photovoltaic device in accordance with claim 62, wherein the photovoltaic element is formed on a face of the polyhedron.
064. (NEW) A photovoltaic device in accordance with claim 53, further including an electronic apparatus mounted within the envelope and being electronically connected to the photovoltaic element, and the photovoltaic element being arranged to provide electric power to the electronic apparatus.
065. (NEW) A photovoltaic device in accordance with claim 64, the electronic apparatus includes a transmitter for transmitting signals to a remote location.
066. (NEW) A photovoltaic device in accordance with claim 64, the electronic apparatus including a transmitter for transmitting signals to other photovoltaic devices.
067. (NEW) A photovoltaic device in accordance with claim 65 further including an antenna connected to the transmitter, and the antenna is formed by a conductive region of the envelope.
068. (NEW) A photovoltaic device in accordance with claim 65 further including an antenna connected to the transmitter, and the antenna is formed by a conductive layer adjacent the photovoltaic element.
069. (NEW) A photovoltaic device in accordance with claim 64, further including an antenna connected to the transmitter, and the antenna includes a conductive member extending outwardly from the envelope.
070. (NEW) A photovoltaic device in accordance with claim 64, further including an energy storage device.

071. (NEW) A photovoltaic device in accordance with claim 70, the energy storage device being in the form of a thin layers formed proximate the plurality of layers of the photovoltaic element.
072. (NEW) A photovoltaic device in accordance with claim 64, further including a sensor.
073. (NEW) A photovoltaic device in accordance with claim 72, the sensor extending outwardly of the envelope.
074. (NEW) A photovoltaic device in accordance with claim 64, in the form of an individual module.
075. (NEW) A photovoltaic device in accordance with claim 74, in the form of a mote arranged to provide information about an environment.
076. (NEW) A photovoltaic device in, accordance with claim 75, the device being enclosed in a resilient cover.
077. (NEW) A photovoltaic device in accordance with claim 75, having an outer shape which is aerodynamic.
078. (NEW) A photovoltaic device in accordance with claim 75, further including means for orienting the device.
079. (NEW) A photovoltaic device in accordance with claim 78, wherein the orienting means includes a predetermined center of gravity of the device.
080. (NEW) A photovoltaic device in accordance with claim 78, wherein the orienting means includes a projection projecting outwardly of the device.
081. (NEW) A photovoltaic device in accordance with claim 78, the orienting means including an adhesive portion on an outer surface of the device.

082. (NEW) A photovoltaic device in accordance with claim 53, the device being mounted on a substrate and being electrically connected to the substrate.
083. (NEW) A photovoltaic device in accordance with claim 82, including a channel through the envelope to a conductive layer of the device and a conductor connecting the conductive layer to the substrate.
084. (NEW) A photovoltaic device in accordance with claim 83, wherein the channel is lined with a conductive material.
085. (NEW) A photovoltaic device in accordance with claim 81, wherein the substrate includes a grid of conductors and the photovoltaic device is electrically connected to the grid.
086. (NEW) A photovoltaic device in accordance with claim 82, wherein the substrate includes a depression, and the photovoltaic device is mounted within the depression.
087. (NEW) A photovoltaic device in accordance with claim 82, the substrate including reflective means to reflect radiation incident on the substrate towards the device.
088. (NEW) A photovoltaic device in accordance with claim 53, wherein the photovoltaic element is a thin film photovoltaic element.
089. (NEW) A photovoltaic device in accordance with claim 88, wherein the thin film photovoltaic element is a Dye Solar Cell (DSC) element.
090. (NEW) A photovoltaic device in accordance with claim 89, wherein an internal electrode of the Dye Solar Cell (DSC) element comprises carbon.

091. (NEW) A photovoltaic device in accordance with claim 89, wherein the device stores a reservoir of electrolyte to provide an electrolyte supply to an electrolyte layer of the Dye Solar Cell (DSC) device.
092. (NEW) A photovoltaic device in accordance with claim 53, a resilient material being provided within the device to secure elements of the device and provide mechanical rigidity.
093. (NEW) A mote arranged to provide information about an environment, the mote including a photovoltaic element and an electronic apparatus confined by an envelope, the photovoltaic element or the photovoltaic element being arranged to provide electric power to the device.
094. (NEW) A mote in accordance with claim 93, the photovoltaic element including a plurality of layers.
095. (NEW) A mote in accordance with claim 93, the photovoltaic element being a Dye Solar Cell element.
096. (NEW) A mote in accordance with claim 93, being arranged to operate with a plurality of like motes.
097. (NEW) A photovoltaic array, including a plurality of photovoltaic devices in accordance with claim 82, mounted on the substrate.
098. (NEW) A method of manufacturing a photovoltaic device including the steps of forming a photovoltaic element from a plurality of layers of differing chemical composition on conducting core, and forming an envelope with at least a portion of the envelope having a curved profile.

099. (NEW) A method of manufacturing a photovoltaic device including the following steps:

- providing an envelope, at least a portion of the envelope having a curved profile, and
- forming a photovoltaic element from a plurality of layers of differing chemical composition; the layers being formed on at least part of the surface of the envelope.

100. (NEW) A method of manufacturing a photovoltaic device in accordance with claim 99, further including steps of placing inside the envelope at least the following components:

a transmitter,

a sensor,

an energy storage device; and

electrically connecting these components and forming an antenna on or adjacent to the surface of the envelope, and the antenna being electrically connected with the transmitter.

101. (NEW) A method of manufacturing a photovoltaic device in accordance with claim 100, further including the step of enclosing the envelope into resilient transparent cover.